

Project demonstration

How to download the Files:

- ⚡ You can download a “stripped” module containing only the code files you need from within Brightspace (see module “Project1” under content)
 - ↪ There is a (much) larger file with some additional data at:
http://www.cs.bc.edu/~sciore/simplydb/SimpleDB_3.3.zip
- ⚡ You only need to care about simplydb and simpleclient folders
- ⚡ You need to edit code in the file Buffer.java which can be found in the simplydb folder you will find the buffer folder.
- ⚡ I used eclipse to build and run the project but you are free to use an IDE of your choice.

Installation instructions

- ▶ To install the SimpleDB engine, you must add the simplydb folder to your classpath.
- ▶ To do so using Eclipse, first create a new project; call it ‘SimpleDB Engine’.
- ▶ Then copy the simplydb folder to the src folder of the project.
- ▶ Finally, refresh the project from Eclipse, using the refresh command in the File menu or if you are using a different IDE refresh the page.

Installation instructions(2)

- ▶ The simpleclient folder contains example programs that call the SimpleDB engine.
- ▶ You should create a new project for them; call it 'SimpleDBClients'.
- ▶ To ensure that the example programs can find the SimpleDB engine code, you should add the SimpleDB Engine project to the build path of SimpleDB Clients.
- ▶ Then use the operating system to copy the contents of simpleclient into the src directory of SimpleDB Clients.
- ▶ You are all set. You can open Buffer.java and start coding!! The next slides explains how to run the testcases for the project.

Running the server

- ⤵ You will need to run the server to run the test cases.
- ⤵ You run the server code on a host machine, where it will sit and wait for connections from clients. It is able to handle multiple simultaneous requests from clients, each on possibly different machines. You can then run a client program from any machine that is able to connect to the host machine.
- ⤵ To run the SimpleDB server, run Java on the `simplifiedb.server.StartServer` class (run `StartServer.java` which is in the `simplifiedb` folder). The argument to the class is the name of a folder that SimpleDB will use to hold the database. If you leave out the argument, it will use "studentdb". If a folder with that name does not exist, then one will be created automatically in the current directory.

Running Some examples and testing

- ↓ Some examples are provided in simple clients folder. I have used simpleIJ.java which can be found in the simpleclients folder.
- ↓ After running simpleIJ.java, a console/terminal will open up.
- ↓ SimpleDB clients can be run in embedded mode or network mode.
- ↓ You need to type `jdbc:simpledb:xyz`", where xyz is the name of the database. The database will be created if it does not exist, in the current directory of the client program.
- ↓ Then you can go to hw3.test in buffer folder and run the test. This demonstrates The buffer pinning and non pinning.

Questions

- ↓ You can contact Faisal Vora (voraf@purdue.edu) if you have questions about the Project.